KENWOOD

STEREO INTEGRATED AMPLIFIER

# KA-128

# INSTRUCTION MANUAL

KENWOOD CORPORATION

B50-9429-00 (JA)
B50-9609-00 (SI) (K, P, E, M, X, U, UE)(T)
90/12 11 10 9 8 7 6 5 4 3 2 1 89/12 11 10 9 8 7 6 5 4 3 2

# Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.
We appreciate your patronage and take pride in the long tradition of quality components, that our company represents.
So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features, and system-connection considerations, so that your listening pleasure will be enhanced right from the start.
You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability, we have sought to anticipate your needs and desires.
**Keep this manual handy for future reference.**

## For your records

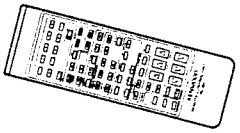
Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.
Model _____ Serial Number _____

## Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.
Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.
We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

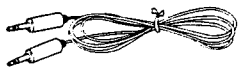
### Accessories

Remote control unit × 1

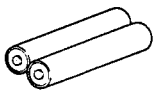


The model number varies depending on the sales area.
RC-80 for U.S.A. and military
RC-80X for Australia
RC-80E for other countries

System control cord × 1
(For Europe ..... 4)



Battery ("AA" or "R6") × 2



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# Before applying power

**Caution : Read this page carefully to keep your safety.**

### For the U.S.A. and Canada

**Important!**

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only.

### For Australia and Europe

**Important!**

Units shipped to Australia are designed for operation on 240 V AC only.

Units shipped to Europe are designed for operation on 220 V AC only.

### For the United Kingdom

**Important!**

Units shipped to the U.K. are designed for operation on 240 volts AC only.

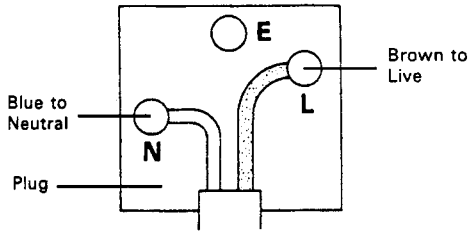
The mains plug must be removed from the wall socket prior to any internal examination.

The wires in this mains lead are coloured in accordance with the following code:

Blue ..... Neutral
Brown ..... Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

**Wire colour** — **Plug terminal marking**
Blue ..... N or Black
Brown ..... L or Red




**Notes:**

1. If a 13-amp plug is used, this must be fitted with a 5- amp fuse.
2. If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

### For other countries

**Important!**

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

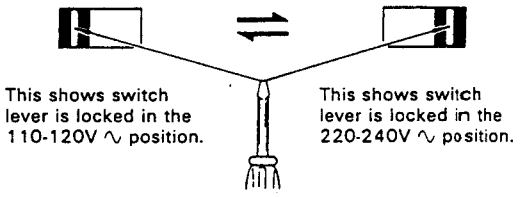
**AC voltage selection**

This unit operates on 110-120 or 220-240 volts AC. Two AC voltage selector switches on the rear panel are set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of these switches match your line voltage. If not, it must be set to your voltage in accordance with the following directions.

**Note:**

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

AC110-120V∿◄►AC220-240V∿ AC110-120V∿◄►AC220-240V∿




Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

**AC voltage selector switch**

# Safety precautions

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

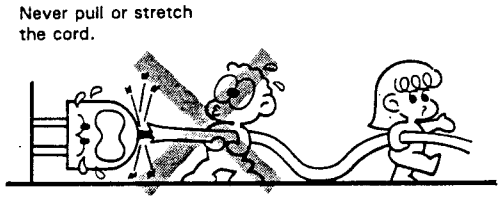
| | |
|---|---|
| | CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. |
| | THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS. |
| | THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE. |

# IMPORTANT SAFEGUARDS ⚠Caution Read this page carefully to keep your safety.

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

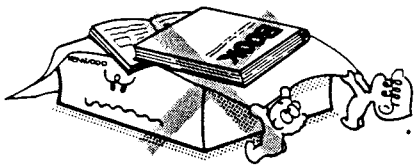
1. **Power sources** — The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

2. **Power-cord protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

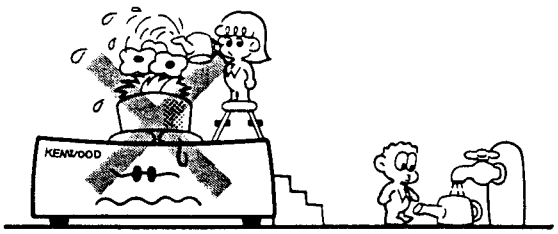



3. **Grounding or polarization** — The precautions should be taken so that the grounding or polarization means of this unit is not defeated.

4. **Ventilation** — The unit should be situated so that its location or position does not interfere with its proper ventilation.
To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.
Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.

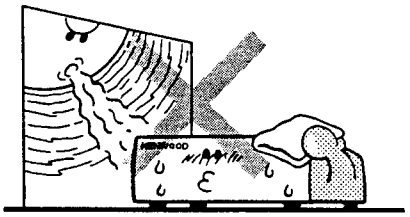


5. **Water and moisture** — The unit should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

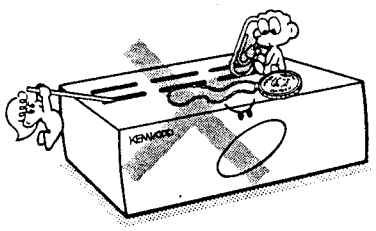


6. **Temperature** — The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).

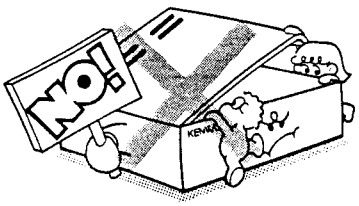
7. **Heat** — The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.



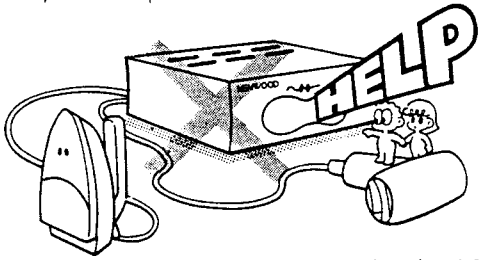
8. **Electric shock** — Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



9. **Enclosure removal** — Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



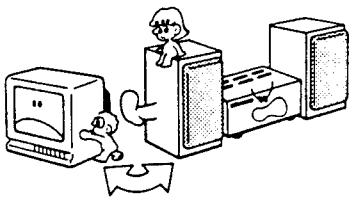

10. **AC outlets** — Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.



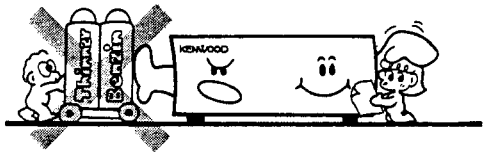

The maximum capacities indicated for the AC outlets on the rear panel of the this unit are as follows.

UNSWITCHED outlets ; 200 W

11. **Magnetic fields** — Keep the unit away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.



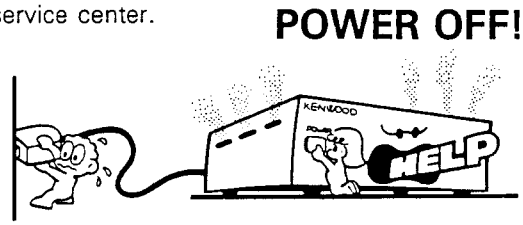
12. **Cleaning** — Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.




13. **Carts and stands** — An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

14. **Nonuse periods** — The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

15. **Abnormal smell** — If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service center.




16. **Damage requiring service** — The unit should be serviced by qualified service personnel when:

**A.** The power-supply cord or the plug has been damaged; or

**B.** Objects have fallen, or liquid has been spilled into the unit; or

**C.** The unit has been exposed to rain; or

**D.** The unit does not appear to operate normally or exhibits a marked change in performance; or

**E.** The unit has been dropped, or the enclosure damaged.

17. **Servicing** — The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

18. **Outdoor antenna grounding** — If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/ NFPA No. 70—1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.

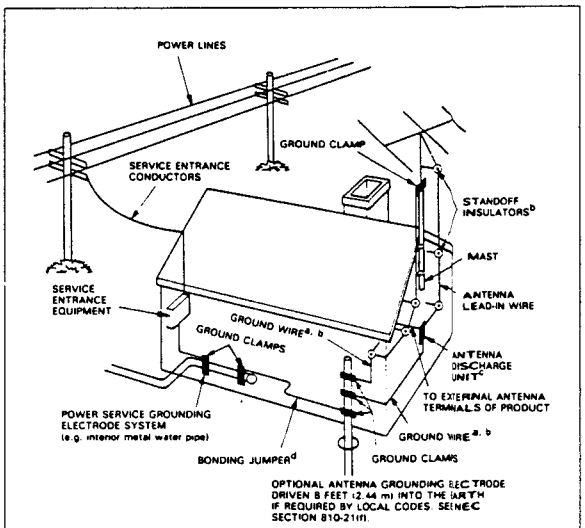

POWER LINES
GROUND CLAMP
SERVICE ENTRANCE CONDUCTORS
STANDOFF INSULATORS[b]
MAST
ANTENNA LEAD-IN WIRE
SERVICE ENTRANCE EQUIPMENT
GROUND WIRE[a, b]
GROUND CLAMPS
ANTENNA DISCHARGE UNIT[c]
TO EXTERNAL ANTENNA TERMINALS OF PRODUCT
POWER SERVICE GROUNDING ELECTRODE SYSTEM (e.g. interior metal water pipe)
GROUND WIRE[a, b]
BONDING JUMPER[d]
GROUND CLAMPS
OPTIONAL ANTENNA GROUNDING ELECTRODE DRIVEN 8 FEET (2.44 m) INTO THE EARTH IF REQUIRED BY LOCAL CODES. SEE NEC SECTION 810-21(f).

FIGURE
EXAMPLE OF ANTENNA GROUNDING ACCORDING TO THE NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 — "RADIO AND TELEVISION EQUIPMENT"

[a] Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum, No. 17 AWG (1.0 mm²) copper-clad steel or bronze wire, or larger, as a ground wire.

[b] Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 — 6 feet (1.22 — 1.83 m) apart.

[c] Mount antenna discharge unit as close as possible to where lead-in enters house.

[d] Use jumper wire not smaller than No. 6 AWG (13.3 mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).

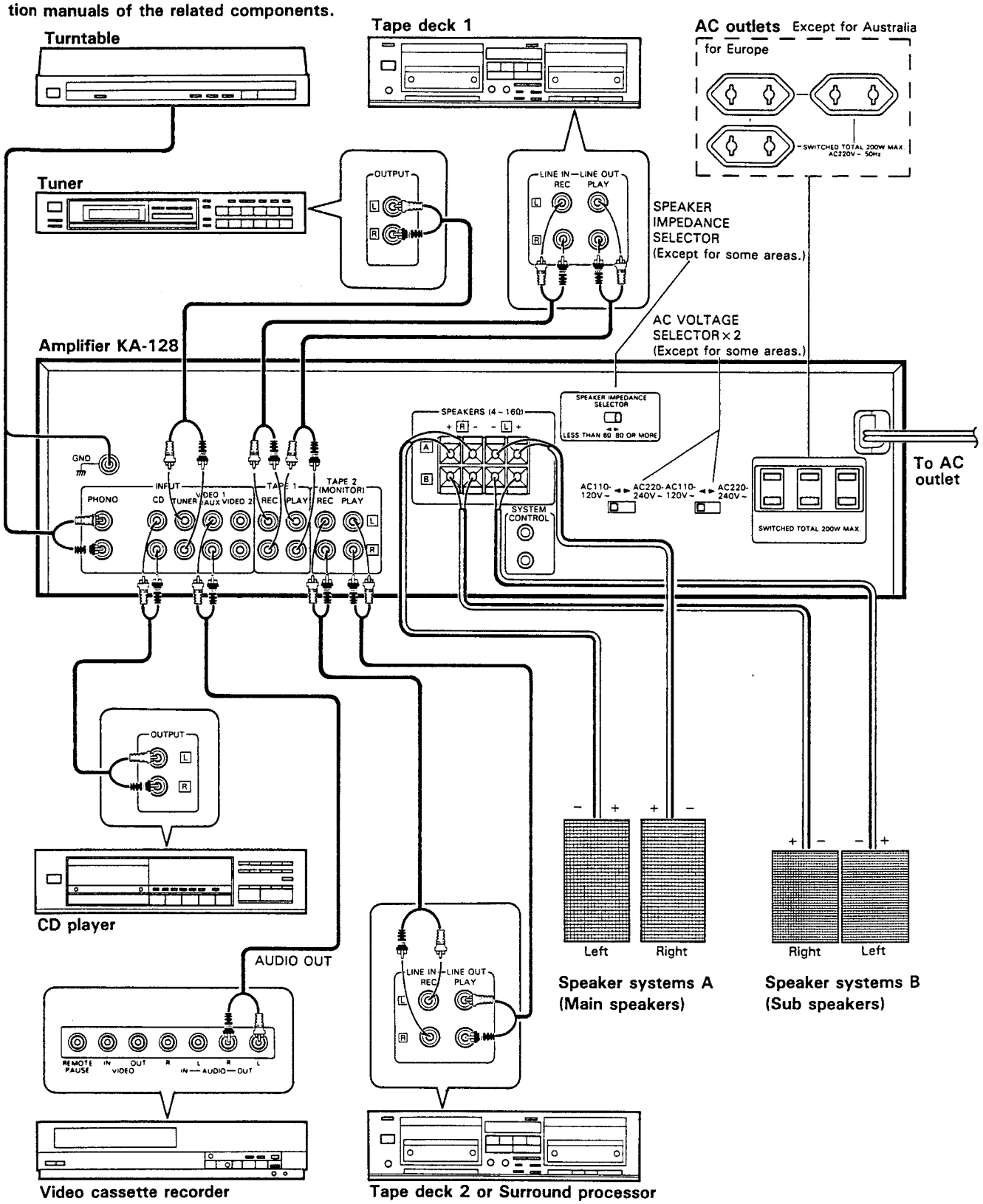
19. **Power lines** — An outdoor antenna should be located away from power lines.

**Notes:**

1. **Item 3 is not required except for grounded or polarized equipment.**
2. **Item 10 is not required except for units provided with AC outlets.**
3. **Item 18 and 19 are not required except for units provided with antenna terminals.**
4. **Item 18 complies with UL-1270 in the U.S.A.**

# System connections

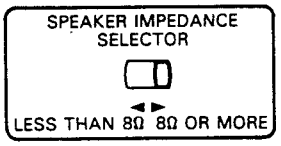
Make connection as shown in the diagram below. When connecting the related system components, refer also to the instruction manuals of the related components.




**Note:**

1. To prevent possible problems, always disconnect the power plug or turn off the POWER key of the amplifier before connecting or disconnecting the audio cables.
2. When connecting audio the cables, always insert the pin plugs correctly into the connecting jacks.
   - Insufficient insertion may result in no-sound problems or generation of noise.

| Speaker impedance | Selector position |
|---|---|
| 4Ω, 6Ω | "LESS THAN 8Ω" |
| 8Ω, 16Ω | "8Ω OR MORE" |




## ■ Setting the SPEAKER IMPEDANCE SELECTOR (Except for U.S.A. and Canada)

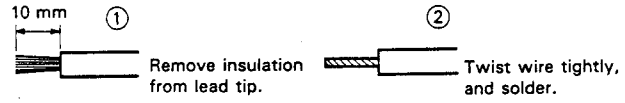
**According to the impedance of the speakers used, set the SPEAKER IMPEDANCE SELECTOR at rear as tables.**

**Notes:**

1. **During speaker system connection and operation of the SPEAKER IMPEDANCE SELECTOR, set the POWER switch to OFF.**
2. **Check that the connected lead wires of the speaker systems do not come into contact with other jacks or terminals.**
3. **When only one set of speakers is used, use the SPEAKERS A terminals.**
4. **Even when only one of speaker systems A and b uses 4-ohm or 6-ohm speakers, be sure to set the SPEAKER IMPEDANCE SELECTOR to "LESS THAN 8 Ω".**

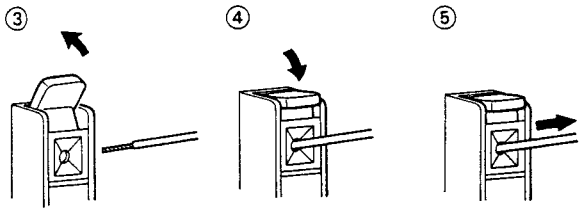
## ■ Connecting speaker cords

1. **Strip the insulation from the cord as shown below.**




2. **Depress the terminal knob upward or downward as shown below and fully insert the cord into the slot. Then return the knob to lock the cord.**

3. **After connection, pull the speaker cord lightly to check that the connection is secure.**




**Speaker lead connection**

## WARNING!

**Particular attention must be given to making good electrical contact at the amplifier-output and speaker terminals. Poor or loose connections can cause sparking or burning at the terminals because of the very high power that the amplifier can deliver. Follow these steps carefully.**

## ■ AC outlets (Except for some areas)

The AC outlets on the rear panel may be used to supply power to other components in the system, such as turntables, tape decks, etc. Never connect equipment whose power consumption exceeds the maximum value shown at each outlet.

**SWITCHED outlets:**

These outlets supply power only when the unit is turned on. The maximum total capacity (both outlets) is 200 watts.

## ■ Ground

For maximum safety and minimum interference connect the GND terminal to a good earth ground if practicable. A good earth ground is a cold water pipe or a metal stake driven into moist earth. However, never use a gas pipe for this purpose.

# System control operation

**By connecting this unit to other KENWOOD system components equipped with SYSTEM CONTROL jacks, such as a tuner, cassette deck, CD player and/or turntable, the following convenient operations will be available.**

## Connection

**Using the system control cords provided with the KENWOOD system component models, make connections as below.**

## Operation

### Automatic play operation

When starting play with the CD player, turntable, or tape deck, etc. connected to the amplifier or receiver, press the desired INPUT SELECTOR switch on the amplifier or receiver. The CD player, turntable, or tape deck, etc. will automatically enter the play mode.

In the same way, pressing the Play key of the CD player, turntable, or tape deck, etc. will automatically switch the INPUT SELECTOR on the amplifier or receiver to the component on which the Play key is pressed.

### Synchro recording

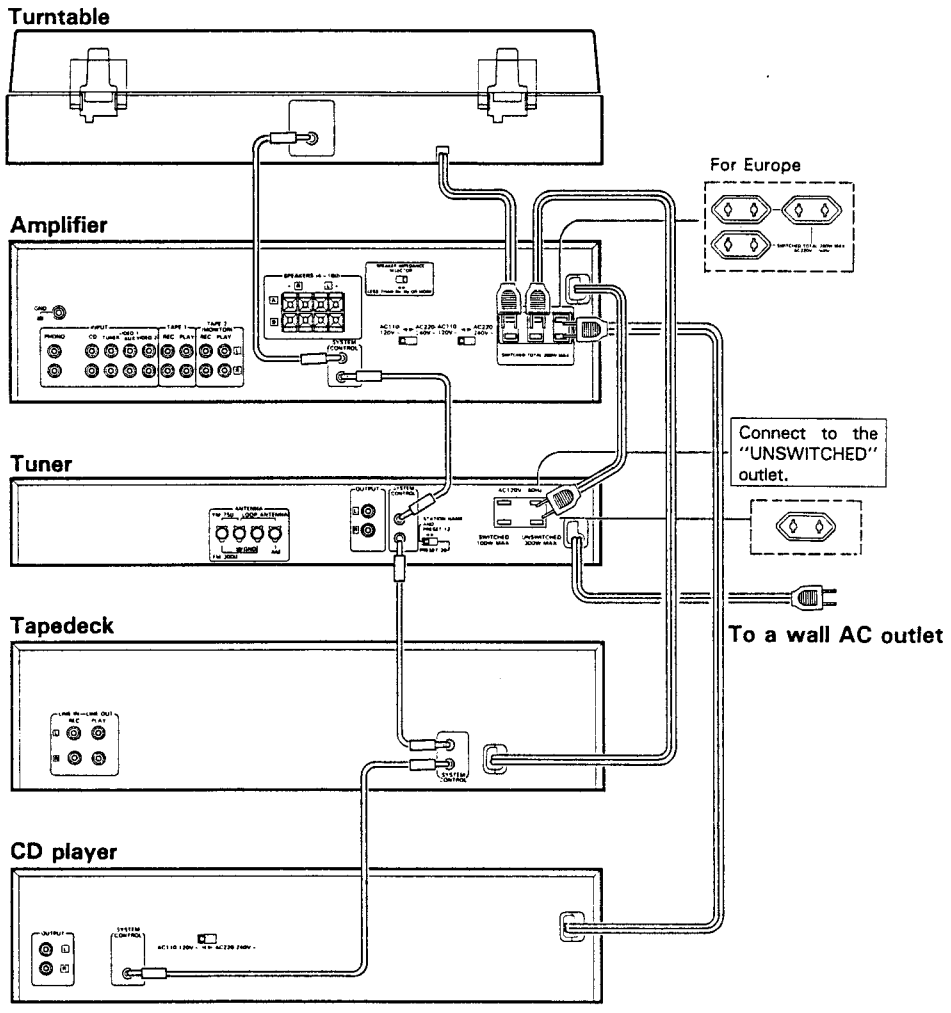
To record the sound from the CD player or turntable onto a tape with the cassette deck, press the PLAY (START) key of the CD player. The cassette deck will start recording automatically, synchronized with the CD player starting play. For more details, refer to the instruction manual of the cassette deck.

### Remote control

When the amplifier, tuner, tape deck, CD player, and turntable are connected via the system control cords, these components can be controlled from the remote control unit (RC-80, RC-80X or RC-80E) supplied with this unit.

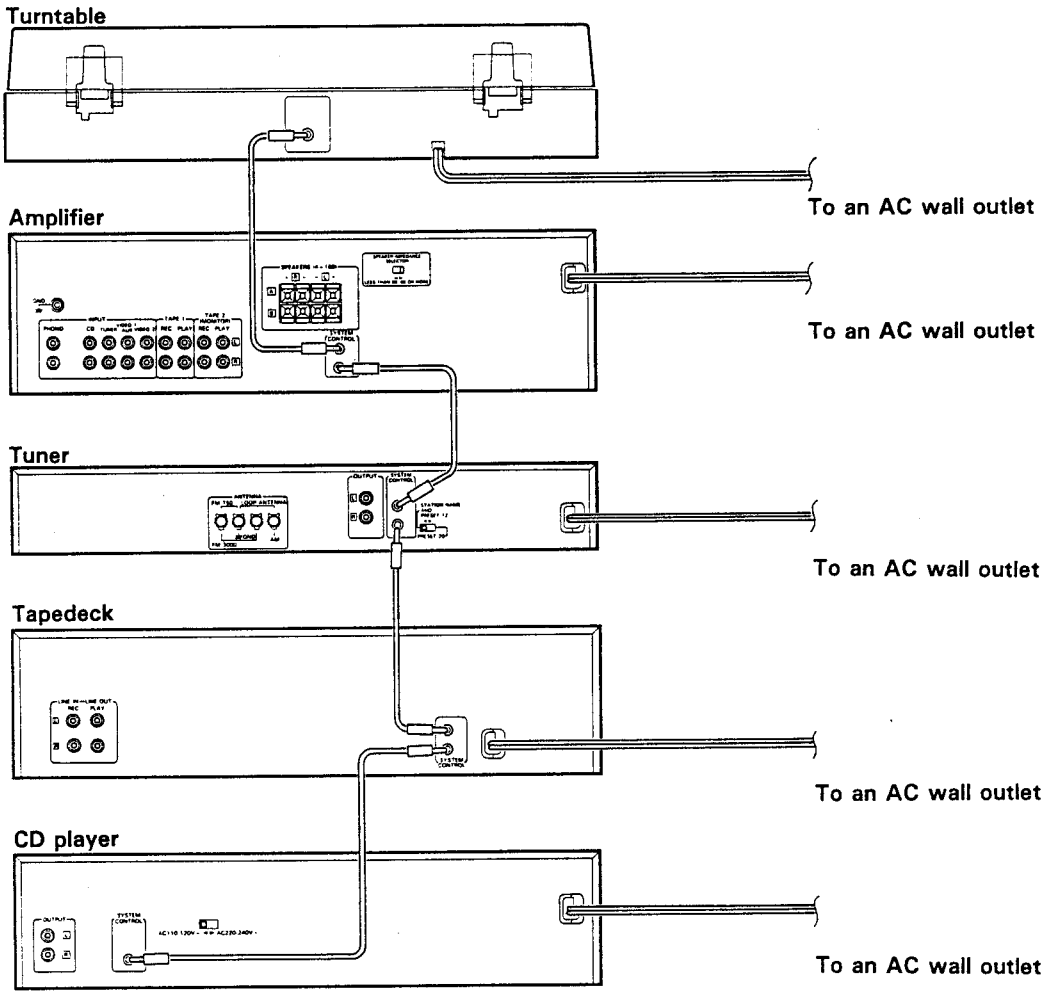
**[U.S.A., military and other models]**

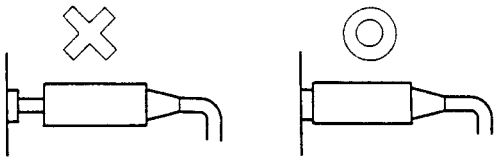
**An AC outlet is not provided on the rear panels of models shipped to Australia. Please refer to the connection diagram on page 9.**



## [Australia models]

**The Australia models are not provided with AC outlets on the rear panels. With these models, connect each unit to a wall outlet or to a commercially-available table tap. With this type of connection, the power to the system cannot be switched ON/OFF simultaneously. Please be sure to switch the individual components ON/OFF securely.**



### ■ Connection of the audio cords and system control cord

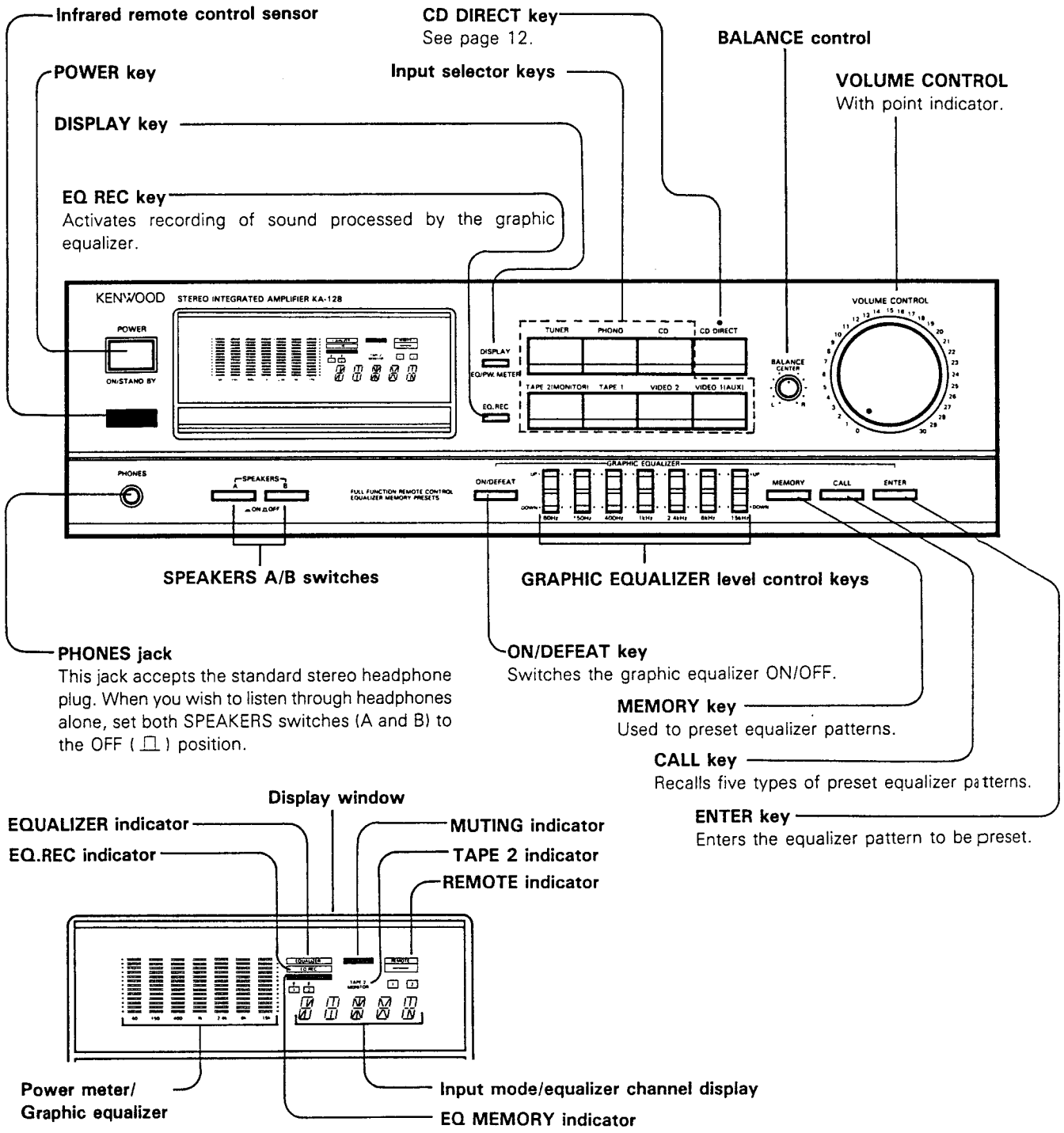
Make sure that the right and left audio cords are connected correctly as in the figure.
If the system control cord and audio cords are not connected properly, the automatic system governing remote control and system functions will not operate.

(For connections of the audio cords, refer to the "System connections" diagram.)

Notes:

1. System control operation of the unit connected to the TAPE 2 jacks cannot be carried out.
2. For connections of the audio cords, refer to the "System connections" diagram.
   - If the system control cords, audio cords and ground lead cord are not connected properly, the automatic system governing remote control and system functions will not operate.
3. If the components connected to this unit are not KENWOOD system components, do not connect anything to the SYSTEM CONTROL jacks.

# Controls and indicators




## ■ SPEAKERS A/B switches

**SPEAKERS A** — Depressing this switch to the ON ( ⎓ ) position will connect the output circuits of the amplifier to the speaker systems connected to the SPEAKERS A terminals on the rear of the unit.

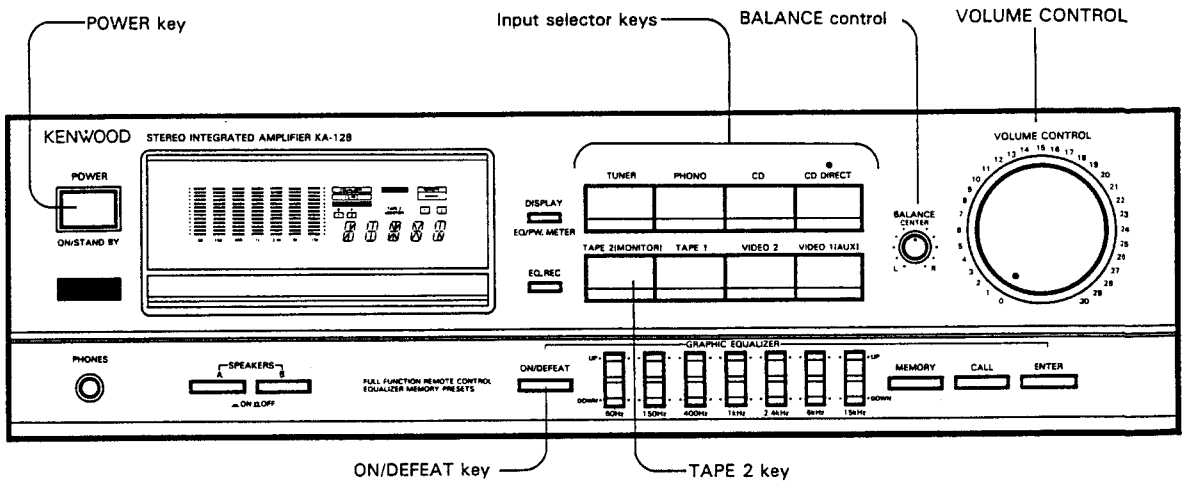
**SPEAKERS B** — Depressing this switch to the ON ( ⎓ ) position will connect the output circuits of the amplifier to the speaker systems connected to the SPEAKERS B terminals on the rear of the unit.

- To activate the speakers systems connected to the SPEAKERS A and B terminals, depress both the SPEAKERS A and B switches to the ON ( ⎓ ) position.

**Note:**

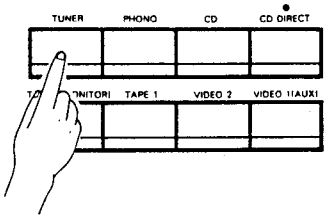
**When speakers are connected only to the SPEAKERS A terminals, the sound will not be heard if both the SPEAKERS A and B switches are depressed to the ON position.**

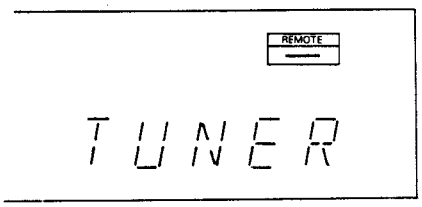
# Operating instructions




## POWER key standby

A small amount of current is retained to support the memory and remote control sensor function when the POWER is switched OFF. This is known as the standby mode. POWER may be switched ON/OFF by the remote control unit.



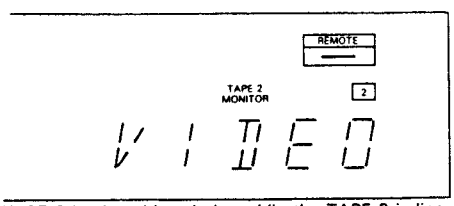




The selected input source is displayed.

## To mute the sound temporarily

**Press the MUTE key on the remote control unit.**

- The MUTING indicator blinks, and the output is muted.
- When the MUTE key is pressed again, the MUTING indicator disappears and the previous output level is resumed.
- The muting indicator also blinks (for approx. 5 seconds) when the muting function is engaged immediately after the power is turned ON.




TAPE 2 is played in priority while the TAPE 2 indicator is lit.

## ■ Basic operation

**1. Press the POWER key to ON.**

- The display lights and the unit becomes operative.
- Pressing the key again switches the power OFF.
- When the components are connected as shown on page 8, all of them can be switched ON/OFF by this POWER key.

**2. Press one of the input selector keys to select the input source to be played.**

- If the system control cord has been connected to the selected source component, it starts play due to the Automatic Play operation feature.
- With the Automatic Play operation feature, when one of the source components is started to be played, the corresponding input selector is automatically switched to the source.
- The selected input source is shown on the display.

**3. If automatic play operation using the system control cords has not been set, start playing the source component selected.**

**4. Adjust the output level with the VOLUME CONTROL knob.**

- When one of the MAIN VOL keys on the remote control unit is pressed, the VOLUME indicator blinks and the VOLUME CONTROL knob is rotated.

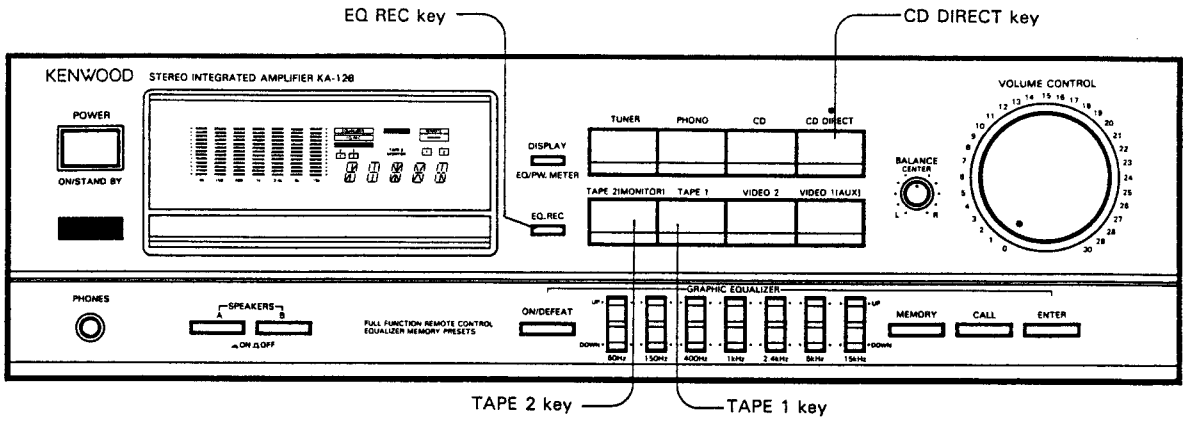
**5. Adjust the balance of the left and right output levels with the BALANCE control.**

**6. Adjust the tone referring to the description in the "Graphic equalizer" section.**

- The graphic equalizer effect can be switched ON/OFF by pressing the ON/DEFEAT key.

**Notes:**

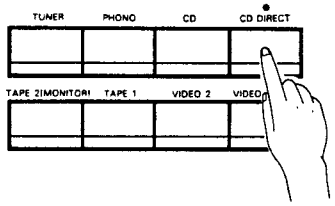
1. **The CD DIRECT key should usually be set to OFF (with the indicator not lit).**
2. **The setting of the input selector key is backed up for a few days even when the POWER plug is disconnected. After this period, the TUNER is automatically selected when the power is supplied.**
3. **When the TAPE-2 key is set to ON, the program source selected with input selector key cannot be heard from the speakers. To listen to the program source other than tape deck 2, be sure to set the TAPE-2 key to OFF.**




## ■ Operations using CD DIRECT key

### To enjoy the high sound quality of CD with more fidelity:

1. **Press the CD DIRECT key.**




2. **Play the CD player.**
   - The CD DIRECT key is given priority over the setting of the input selector keys.
   - The graphic equalizer cannot be used while the CD DIRECT key is ON.
   - To cancel the CD DIRECT input, press the CD DIRECT key again or press one of the input selector keys (except CD and TAPE 2 keys). The input will be switched to the source indicated on the display.

### To listen to the CD direct sound while recording another source:

1. **Press the input selector key of the source to be recorded.**
   - The selected input source name is shown on the display.

2. **Play the source to be recorded, and record it on the tape deck connected to the TAPE 1 jacks.**
   - When the EQ REC key is pressed, sound to which the graphic equalizer effect is applied can be recorded.

3. **Press the CD DIRECT key.**

4. **Play the CD player.**

**Note:**
**This function is available only when the components are connected via the system control connection.**

## ■ To record program source

1. **Select the program source to be recorded with the input selector keys (TUNER, CD, PHONO, VIDEO-1/AUX, VIDEO-2).**
   - When the SYSTEM CONTROL connector on the rear panel is connected as shown in the figure on page 8, 9, pressing the input selector key sets the specified unit to play mode.

2. **Play the program source.**

3. **Set tape deck 1 and/or tape deck 2 to record mode.**

4. **To equalize the recording sound, press the EQ REC key and adjust the GRAPHIC EQUALIZER controls.**

**Note:**
**Sound processed by the equalizer sound can only be recorded with tape deck 1.**

## ■ Dubbing from tape deck 2 to tape deck 1

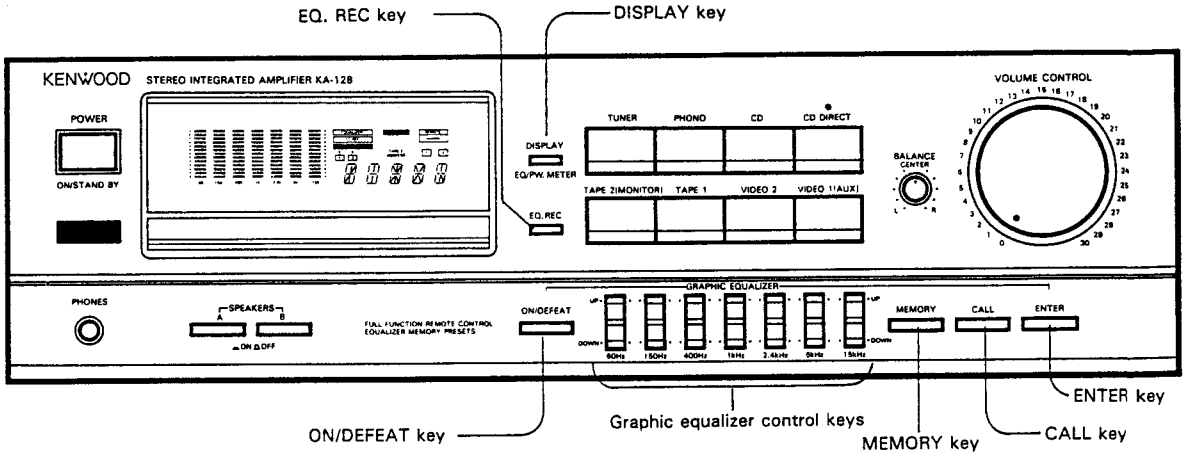
1. **Press TAPE-2 key and an input selector key other than TAPE-1.**

2. **Set tape deck 2 to play and tape deck 1 to record.**

3. **To equalize the recording sound, press the EQ REC key and adjust the GRAPHIC EQUALZIER controls.**

**Notes:**
1. **Do not press the TAPE-1 input selector switch during dubbing.**
2. **To listen to the equalized recording sound, press the ON/DEFEAT key.**

# Graphic equalizer

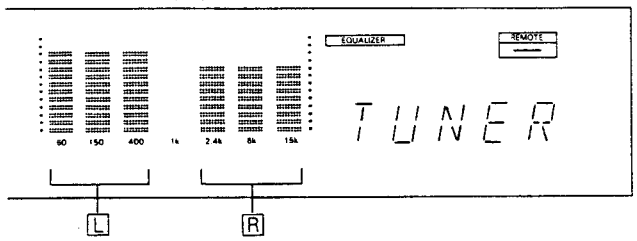



## ■ How to apply the equalizer effect to the sound

1. **Press the ON/DEFEAT key.**
   - The EQUALIZER indicator lights up.

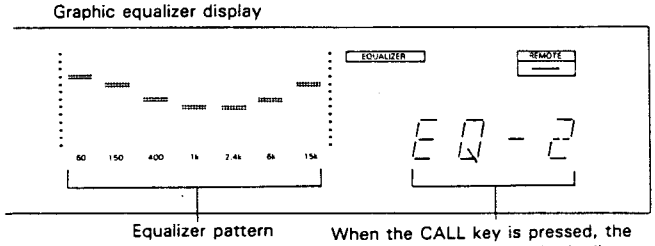
2. **By pressing each of the 7-band equalizer level control keys, create the equalizer pattern which provides the desired tone.**
   - Pressing the upper segment of an equalizer level control key increases the level of the frequency band in +2 dB increments up to +12 dB.
   - Pressing the lower segment of an equalizer level control key decreases the level of the frequency band in −2 dB decrements down to −12 dB.
   - For reference in creating desired tones, read "Function of the graphic equalizer" and "Sound equalization" sections on page 14.
   - If up to 5 equalizer patterns have already been preset in the memory, they can be recalled in sequence by pressing the CALL key.

Power meter display




- The levels vary according to the input signal.

Graphic equalizer display




Equalizer pattern

When the CALL key is pressed, the recalled preset channel No. is displayed for a few seconds.

## ■ How to store the graphic equalizer patterns

This unit allows you to store up to 5 equalizer patterns in memory for instant recall.

1. **Press the DISPLAY key to set the display to the graphic equalizer mode.**

2. **Adjust the GRAPHIC EQUALIZER control keys to obtain the desired equalizer pattern.**

3. **Press the MEMORY key. The MEMORY indicator lights up in the display.**

4. **Within approx. 5 seconds after pressing the MEMORY key, press the CALL key to select the desired equalizer channel (EQ-1 to EQ-5) in which you want to store the equalized pattern.**

5. **Press the ENTER key to store the equalized pattern in memory.**

6. **To recall a preset equalizer pattern which has already been stored, press the CALL key.**

## ■ Display window

### Power meter display:

To display, press the DISPLAY switch to change the display to the power meter mode.
It displays the output level for each channel of program source signal selected by the input selector keys.

### Graphic equalizer display:

Press the DISPLAY key to change the display to the graphic equalizer mode.
Even while the spectrum analyzer display mode is activated, the display enters the graphic equalizer mode for approx. 5 seconds in the following cases:

1. **When the POWER key is turned ON.**
2. **When any of the GRAPHIC EQUALIZER control keys is pressed.**
3. **When the MEMORY key is pressed.**
4. **When the CALL key is pressed.**

In these cases, the spectrum analyzer display will resume approx. 5 seconds later.

## ■ Functions of the Graphic Equalizer

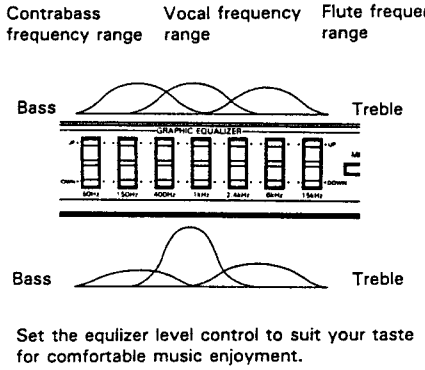
**Compensation for the audio characteristics of the listening room**

The listening room may contain several objects. Some of them reflect sound and some absorb sound, thus the sound reaching your ears is considerably affected by these objects. In such cases, the graphic equalizer can be used to adjust the frequency response of the room for a flat response from low to high frequencies.

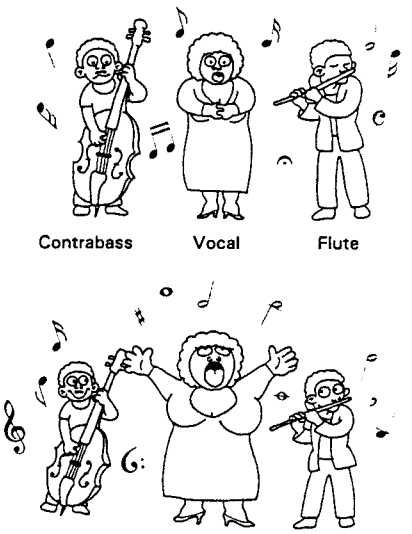
- Low frequencies are absorbed by beds, chairs, etc.
- High frequencies are absorbed by curtains, screens, etc.
- The room structure can cause the low frequencies to be unclear, or the high frequencies to be increased drastically.

**Adjustment of sound to your individual taste**

When the reproduced sound contains several musical instruments and voices, the graphic equalizer allows you to enhance or attenuate the sound of specific instruments or voices.




Set the equlizer level control to suit your taste for comfortable music enjoyment.




## ■ Sound equalization

### • Super bass range (60 Hz)

When this control is moved up, the bass instrument (double bass, bass drums, or pipe organ, etc.) sound is increased.
When the super bass sound is boomy, move this control down.

### • Bass range (150 Hz)

Usually, the listening room resonance frequency is in this range.
To eliminate bass resonance, move this control down.

### • Mid-bass range (400 Hz)

This range is the basis of music. Whether the sound is rich or not, depends on this range. When the playback sound is not so good, move this control up.

### • Mid range (1 kHz)

When this control is moved up or down, the baritone or soprano voice is emphasized/de-emphasized. This range is related to the "presence" of music.

### • Mid-high range (2.4 kHz)

This range is related to stimulous and metallic sound. When this range is well compensated, vivid sound can be obtained.

### • High range (6 kHz)

This frequency range is related to the hardness of the sound. When this control is moved up, strings or brass instruments, such as flutes or piccolos, are emphasized. When the control is moved down, the sound will be more soothing.

### • Super high range (15 kHz)

This frequency range is related to the details of the music. When this control is moved up, super high frequency instruments, such as triangles or cymbals, are emphasized, resulting in wide sound and echoes.

# Remote control operation (RC-80/RC-80X/RC-80E)

## ■ Operation

1. **Connect the power plug of the amplifier to an AC outlet.**
   - This enters the amplifier to power standby mode.

2. **Press the POWER key on the remote control unit or the POWER switch on the amplifier.**
   - This unit enters the amplifier to power ON mode.

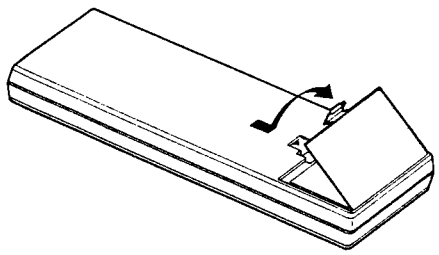
3. **Operate with the keys of the remote control unit.**

Note

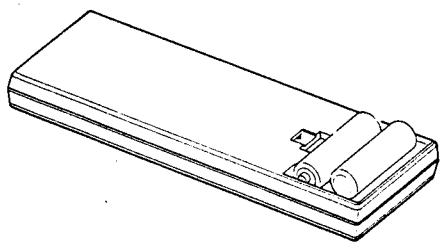
**After pressing one of the operation keys, press the next operation key firmly after an approx. 1 second interval.**
**If the next operation key is pressed immediately after the previous key, misoperation may result.**

## ■ Installing the battery in the remote control unit

1. **Remove the battery compartment cover.**



2. **Insert two size "AA" (R6) batteries confirming the correct polarity and close the cover.**



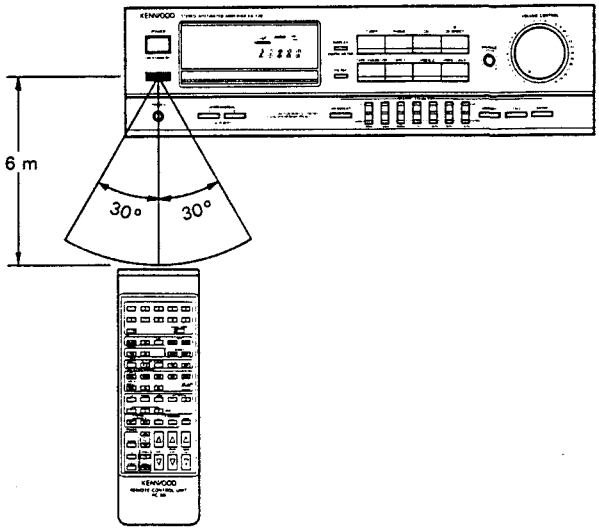
Note:

**The provided batteries are to be used for operation of the remote control unit, and may have a short life. When the remote unit becomes effective only for short distances or does not effectively operate, replace the batteries with two new batteries.**

## ■ Usable range of the remote control unit

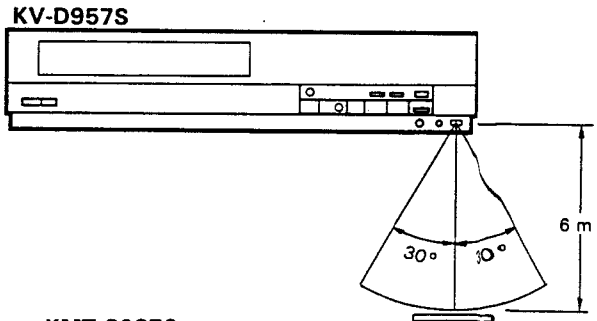
**The usable range of the remote control unit may differ with temperature, humidity, or operating conditions. However, it is defined approximately as shown in the figure below:**

**For controlling the amplifier** **KA-128**

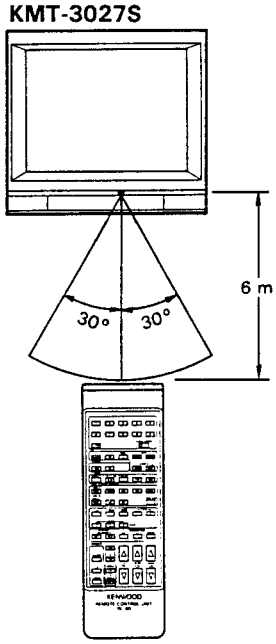



**For controlling TV and VCR (U.S.A. and military models)**

**KV-D957S**



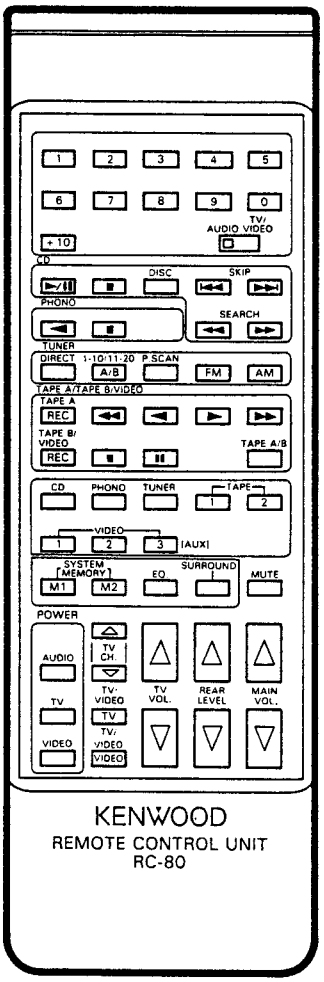

**KMT-3027S**



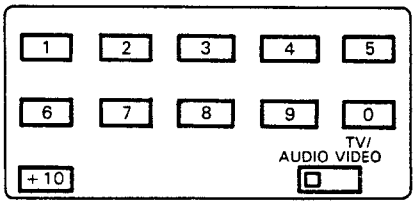
In case any of the following CD players is used, this remote control unit cannot be used to control the CD manual search function or to make entries with the numeric keys (1 to 0 and +10):
DP-M97, DP-37, DP-47

**Remote control unit (U.S.A. and military models)**

**RC-80**



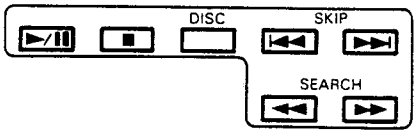

## ■ Numeric keys (1 to 0)




1. **When the CD or TUNER input selector key is selected, these keys can be used in place of the numeric keys on the CD player or tuner, respectively.**
   - The AUDIO-TV/VIDEO switch on the RC-80 must be set to AUDIO.
   - The +10 key is for use exclusively with the CD player.

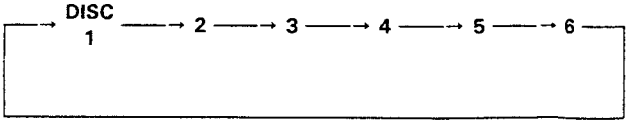
2. **When the AUDIO-TV/VIDEO switch is set to TV/VIDEO, the numeric keys can be used in place of the TV channel select keys.**

## ■ CD player control keys

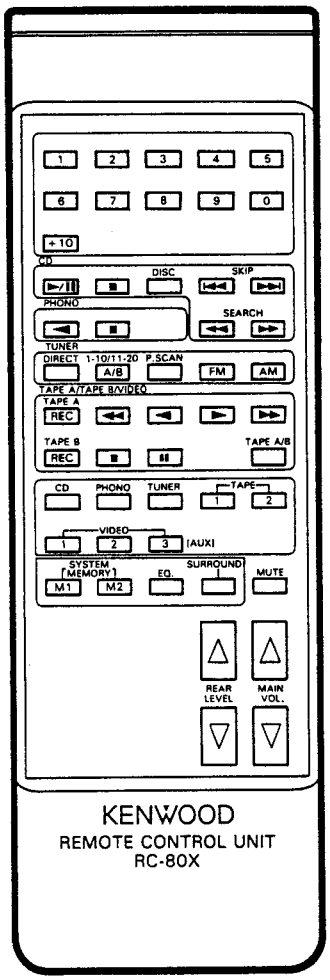



**These keys have the same functions as the keys with the same names on the CD player.**

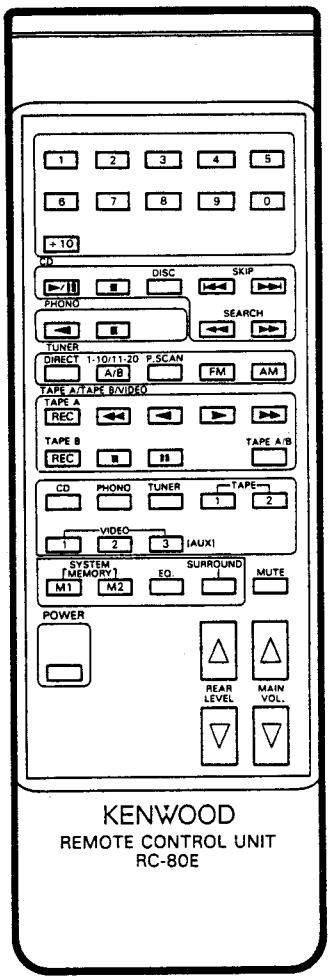
**The DISC key is for use exclusively with a multiple CD player. Pressing the DISC key allows the user to select DISC 1 to DISC 6 in the following cycle.**



Remote control unit (Australia model)
RC-80X



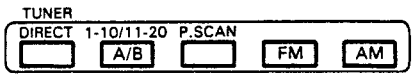

Remote control unit (the Other model)
RC-80E




## ■ Turntable (PHONO) control keys

The Play (◁) and Stop (□) keys are provided.

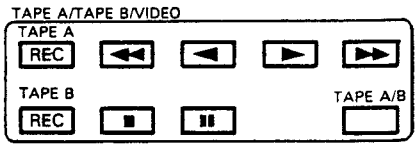
## ■ TUNER control keys




**These keys have the same functions as the keys with the same names on the tuner unit.**

- The DIRECT key operation is not possible with the KT-58/L.
- With the FM/MW/LW band selector of European destination models, MW can be selected by pressing the AM key, but LW cannot be selected from the remote control.

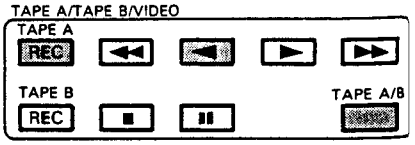
## ■ TAPE deck control keys




**Except for the REC keys, the object of the tape deck control keys is alternated between the TAPE A and TAPE B decks every time the TAPE A/B key is pressed.**
**The REC keys are specialized keys for TAPE A and TAPE B (TAPE B/VIDEO).**

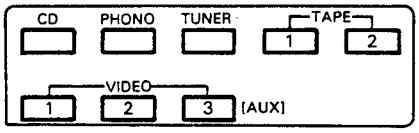
## ■ VIDEO deck control keys (RC-80)

**When the AUDIO-TV/VIDEO switch is set to TV/VIDEO:**




**The tape deck control keys except those marked ▒▒ can be used as the VIDEO deck control keys.**

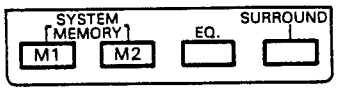
## ■ Input selector keys



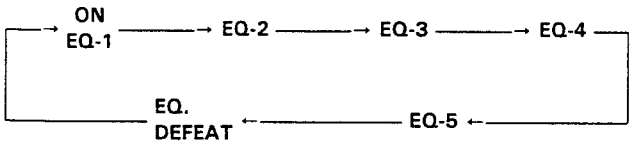

**These keys have the same functions as the input selector keys of this unit.**

- The VIDEO 3 key cannot be used with this unit.

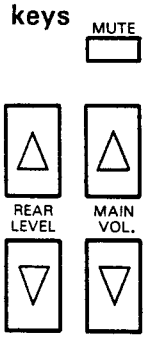
## ■ Equalizer/Surround key




**Keys other than the EQ key are not used with this unit. Every time the EQ key is pressed, the equalizer of this unit can be switched ON/DEFEAT or five preset equalizer patterns can be changed over in the following cycle.**




## ■ Volume level keys




**MAIN VOL keys:**

**Pressing the △ key rotates the VOLUME CONTROL on the main body of the unit clockwise to increase the volume, and pressing the ▽ key rotates it counterclockwise to decrease the volume.**

**MUTE key:**

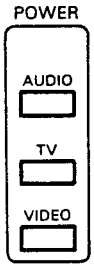
**The MUTE key is not provided on the main body. Muting can be controlled only from the remote control.**

**REAR LEVEL keys:**

**These keys are not used with this unit.**

## ■ POWER keys

**[RC-80]**




**AUDIO key:**

**Switches the power of this unit to ON/STAND-BY (OFF).**

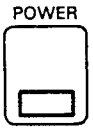
**TV key:**

**Switches the power of the TV set to ON/STAND-BY (OFF).**

**VIDEO key:**

**Switches the power of the video deck to ON/STAND-BY (OFF).**

**[RC-80E]**



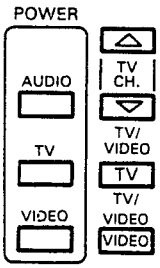

**POWER key:**

**Switches the power of the main body to ON/STAND-BY (OFF).**

**[RC-80X]**

**No POWER key is provided. Switch the power to ON/STAND-BY (OFF) with the POWER key on the main body.**

## ■ TV/VIDEO control keys (RC-80 only)




**TV VOL keys:**

**Pressing the △ key increases the volume of the TV set, and pressing the ▽ key decreases it.**

**TV CH keys:**

**Pressing the △ key shifts the channel tuned on the TV set upward, and pressing the ▽ key shift it downward.**

**TV/VIDEO key:**

**Every time this key is pressed, the input to the TV set is switched between the TV signal and external video signal.**

**TV VIDEO key:**

**Every time this key is pressed, the output from the video deck is switched between the TV channel RF output and video output.**

# In case of difficulty

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

## Control amplifier

| AM, FM, PHONO, CD, VIDEO or Tape playback | Cause | Remedy |
|---|---|---|
| **Power on but no sound.** | a) Power cord not plugged in.<br>b) Poor connection at AC outlet. Power outlet inactive.<br>c) VOLUME CONTROL set fully counter-clockwise. | a) Check plug contact.<br>b) Check outlet using a lamp or other appliance (outlet may be controlled by a wall switch).<br>c) Set the control to your preference. |
| **No sound from left and right speakers.** | a) Speaker cords disconnected.<br>b) No input selector switch is in use.<br>c) The TAPE-2 switch is set to ON. | a) Check speaker connections.<br>b) Push one of the input selector switches to select the desired program.<br>c) Set the switch to OFF. |
| **Sound from left or right speakers, but not both.** | a) Poor speaker connections.<br>b) Defective speaker.<br>c) BALANCE set to one extreme or the other. | a) Check connections at both ends of the speaker cords.<br>b) Reverse speakers. If problem stays with the same speaker, check the speaker.<br>c) Check setting of the BALANCE control. |

| PHONO playback only | Cause | Remedy |
|---|---|---|
| **No sound from both or one speaker.** | Turntable output disconnected. | Check phono cables. |
| **Loud hum drowns out sound.** | Poor ground connection at phono cable connections. | Check phono plugs, particularly outer-shell connections. |
| **Low background hum.** | Hum picked up in turntable or turntable cables. | Keep cables away from power cords. Twist left and right cables together. Reverse AC plug of turntable. Connect ground wire between turntable and GND terminal. |
| **Background buzz.** | TV signal picked up by phono cable (especially near transmitter). | Route phono cables to minimize buzz. |
| **Howling noise at high volume settings.** | Acoustic pickup from speakers. | Increase distance between speakers and turntable. Choose speaker locations carefully. Check turntable suspension. |

## Remote control

| Symptom | Cause | Remedy |
|---|---|---|
| **Remote control unit does not function.** | 1. Batteries are exhausted.<br>2. System control cord is disconnected from the rear panel terminal.<br>3. Operating position is too distant from the unit (infrared sensor).<br>4. Record, tape, or compact disc is not loaded in the component desired to be played.<br>5. Cassette deck desired to be played is in use for recording. | 1. Replace the batteries with new ones.<br>2. Connect it firmly. (Refer to P8, 9)<br>3. Use the remote control unit (transmitter) within an operable area.<br>4. Set the desired source on the component.<br>5. Wait until the recording is over. |
| **Volume level does not increase.** | 1. Volume exceeds the level set at the control amplifier.<br>2. Muting is activated. | 1. Raise the level on the control amplifier.<br>2. Release it. |

### Speaker protection circuit

If "P-OFF" appears on the display window, immediately turn power off by pressing the POWER switch (keys others than the POWER switch are not accepted). The positive (+) and negative (−) speaker cords may possibly be short-circuited. If they are short-circuited, connect the cords properly and turn power on again.

# Specifications

## Audio Section

**Rated Power Output**

**125 watts per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.05% total harmonic distortion. (FTC)**

**Maximum continuous output power**
**(IEC) from 63 Hz to 12,500 Hz 0.7% T.H.D.**
**at 8 ohms** ..... 135 W + 135 W
**(DIN) 1,000 Hz at 8 ohms** ..... 135 W + 135 W
**Total Harmonic Distortion LINE input to SPEAKER output**
**(20 Hz to 20,000 Hz)** ..... 0.04% at 1/2 rated power into 8 ohms
**(1 kHz)** ..... 0.01% at 1/2 rated power into 8 ohms
**Inter Modulation Distortion (60 Hz:7 kHz = 4:1)** .. 0.03% at rated power into 8 ohms
**Power Bandwidth** ..... 10 Hz to 100 kHz at 0.2% T.H.D. 8 ohms
**Frequency Response** ..... 10 Hz to 50 kHz, +0 dB, −3 dB
**Input Sensitivity/Impedance**
**Phono** ..... 2.5 mV/47 k ohms
**Tuner, Tape play, CD, AUX, VIDEO** ..... 100 mV/33 k ohms
**Signal-to-Noise Ratio (IHF-A)**
**Phono** ..... 75 dB for 2.5 mV input
**Tuner, Tape play, CD, AUX, VIDEO** ..... 100 dB
**Phono Maximum Input Level** ..... 150 mV, T.H.D. 0.3% at 1 kHz
**Output Level/Impedance**
**Tape REC (Pin)** ..... 150 mV/3.3 k ohms
**Phono Frequency Response** ..... RIAA standard curve ±0.5 dB (20 Hz to 20,000 Hz)
**Graphic equalizer control**
**(60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz)** ..... ±12 dB
**Loudness Control** ..... +8 dB at 100 Hz (at −30 dB VOLUME Level)

## General

**Power Consumption** ..... 5 A (U.S.A. & Canada models)
270 W (Other countries)
**Dimensions** ..... W : 440 mm (17-5/16″)
H : 133 mm ( 5-1/4″)
D : 275 mm (10-13/16″)
**Weight (Net)** ..... 8.7 kg (19.2 lb)

**Note:**
KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

**Svenska** **Observera:**
Apparatens strömförsörjning kopplas från sekundärt. V.g. ge akt på följande.

Apparaten frånkopplas inte helt och hållet från strömnätet medan apparatens nätsladd är ansluten till växelströmsuttaget.

**Finnish** **Huom:**
Virta yksikköön on kytketty pois sekundaaripuolelta. Huomioi seuraava.

Tämä yksikkö ei ole kokonaan kypketty pois pää virranjakajasta kun pää katkaisin on liitettynä virtatiiriin.

**Dansh** **Bemærk:**
Strømmen til apparatet afbrydes på den sekundære side. Vear opmærksom på følgende.

Denne enhed er ikke fullstendig koblet fra lysnettet så lenge stikket er tilsluttet stikkontakten.

**Norwegian** **Anmerkning:**
Strømmen til apparatet er slått av på sekundærsiden. Vær oppmerksom på det følgende.

Dette apparatet koples ikke fullstendig fra nettet så lenge støpselet står i en stikkontakt, selv om strømbryteren settes i av-stilling.